

“Formulating Alternatives”

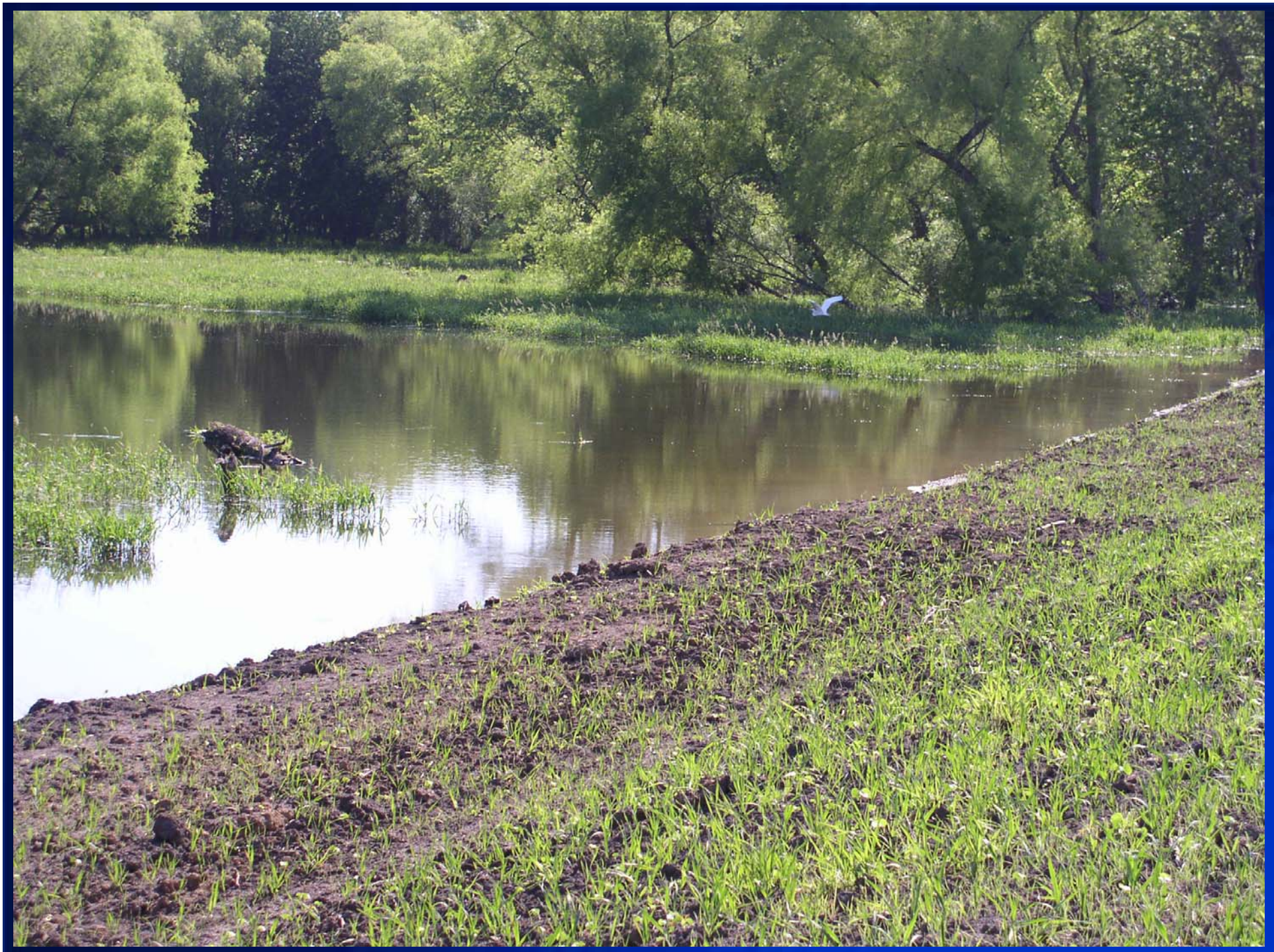
Watershed Planner Training

January 30th, 2007

Step 5: Formulating Alternatives:

- Alternatives are resource management options (fixes) to solve the identified water resource problems.
- One approach may not be sufficient.
- Combinations of approaches, each with its advantages and disadvantages, should be considered.



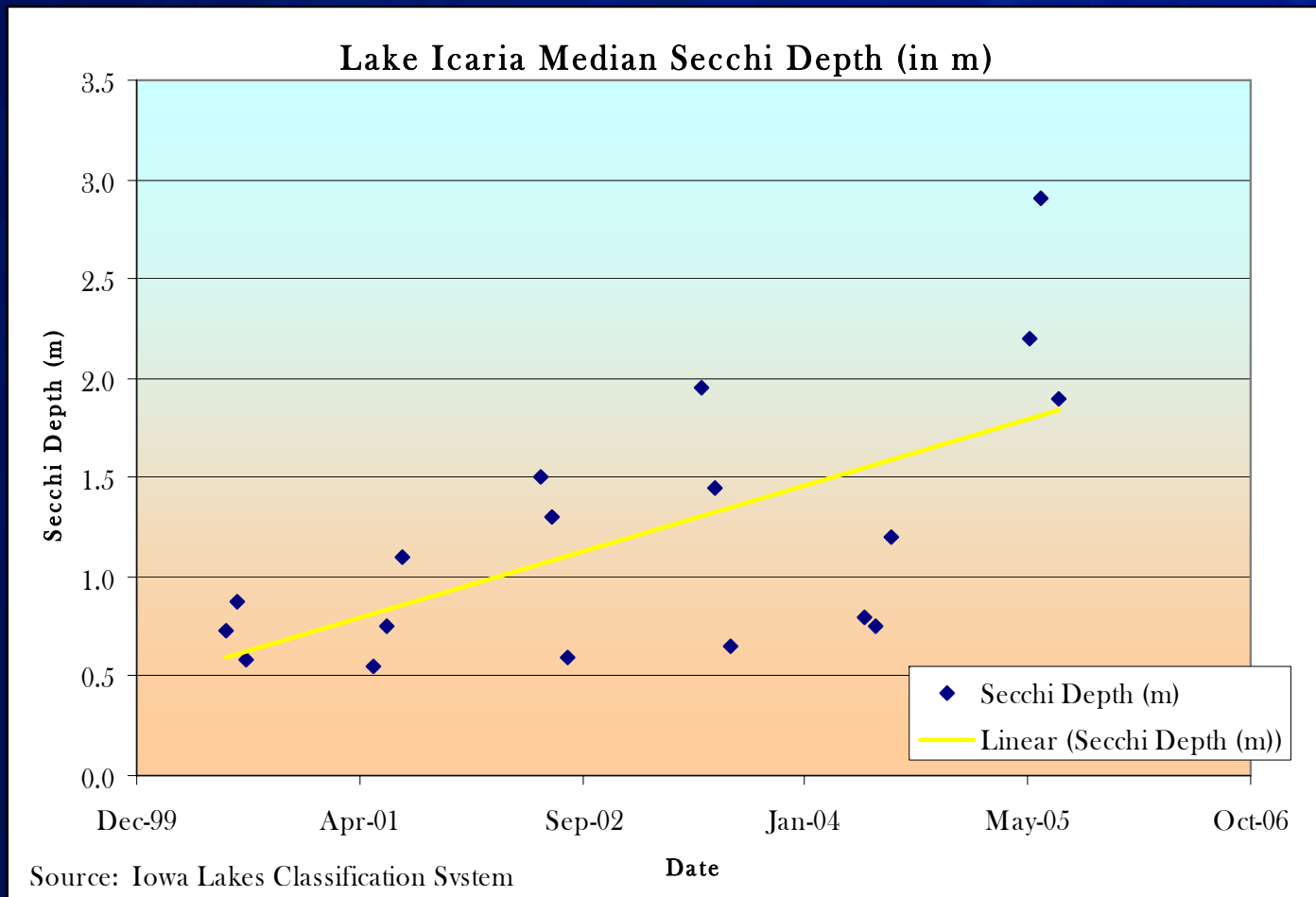


An aerial photograph of a vast agricultural landscape. The terrain is rolling, with fields divided into distinct, curved patterns that follow the contours of the land. The fields are in various stages of growth, with some appearing as dark, tilled soil and others as lush green crops. In the distance, a small cluster of farm buildings is visible on a hill. The sky is filled with large, white, fluffy clouds, and the overall scene is bathed in soft, natural light.

Management Practices

Ensure that proposed alternatives address identified objectives and concerns

Keep your eyes on the prize!



Include alternatives that are “program neutral” so that program rules do not constrain the search for innovative solutions

1. Focus on the resource concerns, not the programs
2. Be somewhat idealistic about what practices could be implemented

Develop alternatives that are socially and politically acceptable



Develop alternatives that are financially and technically feasible





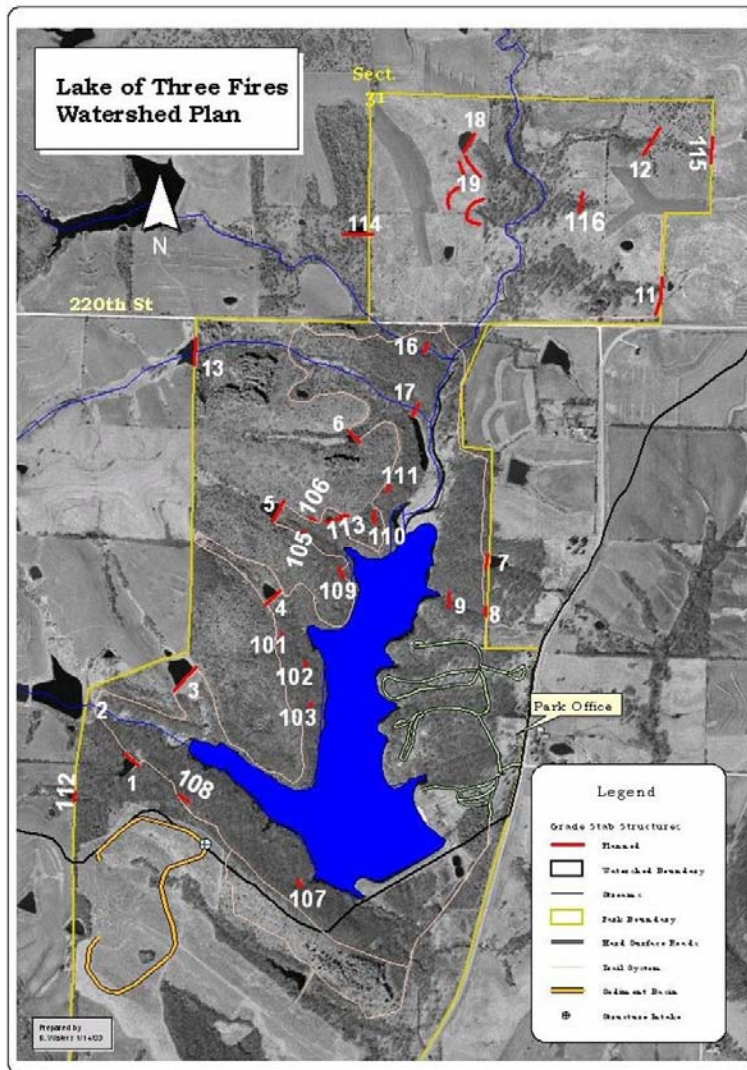
Consider and include regulatory alternatives where appropriate, as well as voluntary activities

- Conservation Compliance
- Fish Passage Regulations
- Work with DNR Field Services Bureau
- US Army Corps of Engineers Permits
- Soil Loss Complaints
- Pesticide and Manure Application Regulations

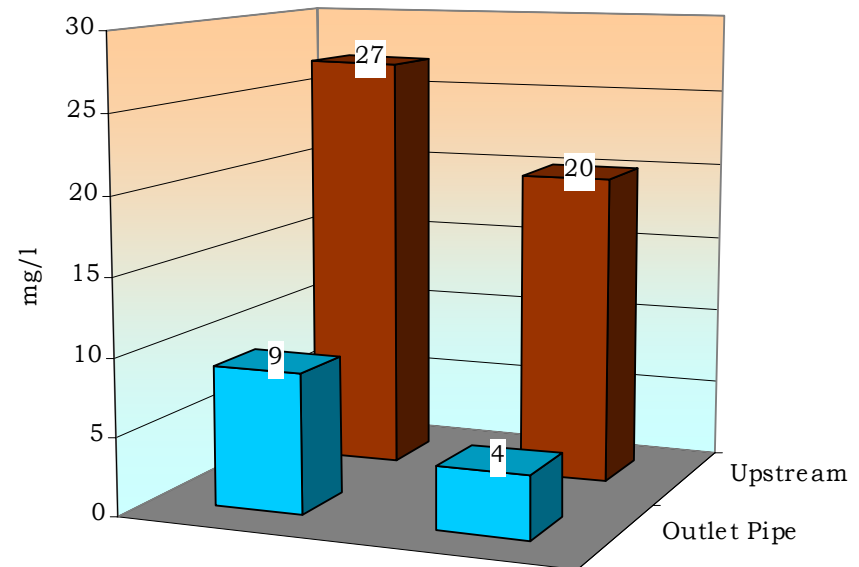
Alternatives may include in-stream/in-lake components as well as conservation practices located in the watershed

In-Lake Renovation Activities	Quantity
Shoreline Deepening and Riprap	6910 feet
Shoreline Riprap Repair	440 feet
Shoreline Riprap	15,300 tons
Rotenone	1890 gallons
Man Hours for Investigation and Renovation	700 hrs
Fish Habitat Mounds	12
Sunken Trees for Fish Habitat	200
Boat Ramp Repair	1
Total Cost	\$ 650,000

Each alternative should be summarized including costs, supporting data, and appropriate maps



Icaria Wetland: Load Reductions for Total Suspended Solids





Bob Waters
Western Regional Coordinator
Division of Soil Conservation
712-243-2913

Vince Sitzmann
SE Regional Coordinator
Division of Soil Conservation
515-242-6008